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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER NGUYEN, THUY-VI THI	
			ART UNIT 3689	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/803,123

Applicant(s)

YASUNAGA, MASARU

Examiner

THUY VI NGUYEN

Art Unit

3689

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-9, 13-17, 18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-9, 13-18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF-08)
- Paper No(s)/Mail Date 10/15/08.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to the applicant's communication filed on 10/22/08, wherein:
Claims 1-4, 10-12, 19 have been cancelled;
Claims 5-8, 13-17, 18, 20-23 have been amended;
Claims 5-9, 13-17, 18, 20-23 are currently pending.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on October 15, 2008 have been considered. Initialed copies of the 1449 Forms are enclosed herewith.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18, 20-23 are rejected under 35 U.S.C. 101 because the claims deal with system containing software and do not meet any of the statutory items such as process (method), machine (apparatus), manufacture (product) or composition. The system claims appear to be an apparatus claim in a preamble "*A repair worker assisting apparatus*", however, there are no structures or functional elements which are required in an apparatus claim. For instant, the independent 18, 20 recited "*a first unit that receives a second unit that calculates.....a thirteen unit that notifies*" appears to be software. Therefore, the claims are directed to nonstatutory subject matter.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1) In claims 5-9, 13-17, 18, 20-23, the phrase "calculating an average number of visits in charge per repair worker" is vague because it's not clear what it means? The examiner has looked at Fig. 17, step S101, but it's not clear what it really means? Is it referred to "past visits in charge made by the repair worker" or "future visits in charge by the repair worker". Furthermore, it is not clear of how the "average number of visit" is calculated or determined?

2) In claims 5-9, 13-17, 18, 20-23, it's not clear what "the dispatch instruction" in the last step refers the exact previous "a dispatch instruction" above since there are several "a dispatch instruction" terms above?

3) Independent claims 18, 20-23, it is not clear the limitation are recites the system in terms of how it operates. The claims have been given patentable weight by considering the claimed structure and the method recitations have been given weight only to the extent that the prior art must be capable of performing as claimed. Applicant is reminded that structure is what is claimed in system (apparatus) claims not method steps. The claims are rejected because the limitations identify the structure by method steps.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 5-9, 13-17, 18, 20-23** are rejected under 35 U.S.C 103 (a) as being unpatentable over MILMAN (US 6, 898, 435) in view of HARRISON ET AL (US 6,990,458).

As for independent claim 5, MILMAN discloses a repair worker assisting method for assisting in performing a maintenance task of equipment at a customer's residence, the method comprising:

a) issuing an order [to deliver a component for replacement upon receiving a request for a maintenance task from a customer];

{see abstract, col. 2, lines 38-39, col. 3, lines 34-50, col. 6, lines 65-67, col. 7, lines 1-11; and figure 2; disclose issuing an order to deliver/ship a software/hardware/part item to the customer address or software can be downloaded electronically to the customer site}. Note as for the term "to deliver...." is not a positive recite step but rather intended used of the previous step "issuing".

b) notifying server to dispatch a repair worker [to perform the maintenance task upon having accepted a customer's payment for the component];

{see abstract, col. 2, lines 46-67; figures 1-2, disclose central dispatch office receive customer calls, then dispatch or assign the task to available technicians in the same geographic location as the customer}

Note, as for the phrase "to perform...." Is not a positive recite step but rather as intended used of the previous step "notifying". As in a method claim, an active, positive method step is required.

c) receiving an instruction for dispatching a repair worker from a server that assists in dispatching repair worker [to perform maintenance tasks];

{see abstract, figure 1, col. 3, lines 20-50; col. 5, lines 52-61 and figure 2 steps 46-50, *"technician is instructed to dispatch to customer location"*; and col. 2, lines 46-67 *"technician receives the customer service calls for customers within the assigned geographic location"* }

d) referencing a database that servers to manages repair workers for a plurality of areas, when the instruction for dispatching a repair worker is issued for the server;

{see figures 1-2, 18, col. 3, lines 7-20, col. 6, lines 35-48, and col. 9, lines 12-25 disclose the tracking or managing the workers or technician for a plurality of areas}

e) referencing a database that servers to manage a scheduled visit number for each repair worker and assigned number of repair workers for each area;

{see figures 1-2, col. 2, lines col. 3, lines 50-61, col. 7, lines 11-23, lines 64-67 disclose the managing a schedule visit ; and see col. 3, lines 7-20 disclose the assigned geographic location for the respective technician}

g) extracting an appropriate repair worker based on the location of the customers' residence and the order;

{see col. 3, lines 7-20 "assigned geographic location for the respective technician; col. 6, lines 28-35; col. 9, lines 12-25 disclose *technicians within the any respective geographical zone will be presented with the service call*}

h) notifying a mobile apparatus of the appropriate repair worker about the dispatch instruction.

[see col. 4, lines 35-43 col. 5, lines 52-61; col. 6, lines 35-58 and figures 1 (hand held unit 26), figures 5-6 disclose notifying or transmitting or communicating between the server computer with the technician hand held device about the information or data e.g. the service call or work order information appears to be a "data processing" method, therefore, the term "*dispatch instruction or information or data*" have been determined to be non-functional descriptive material (NFDM), thus having no patentable weight and does not need to be taught by the prior art. Nonfunctional descriptive material can not render nonobvious an invention that would have other wise been obvious. See MPEP 2106.01.

Note: for convenience, letters (a)-(h) are added to the beginning of each step.

MILMAN discloses all the limitation as cited above, except for step (f) which appears to be dealt with generating or creating an order contain information about number of visit/worker having a range ranking from low to high value of the "number of visits" and wherein the number of visits is calculated.

In the similar method for generating or assignment task to technician/worker using the dispatch system, **HARRISON ET AL** teaches the generating/creating an order contain information about the ranking number of visit or worker order e.g. work order takes a shortest and longest to complete and the number of worker order or number of visit assigns to the qualified technicians who have enough available time to complete work and also minimum distance /location in order to generate the work order request and track the technicians' progress more efficiency and effectively {HARRISON col. 1, lines 50-67, figure 8, col. 7, lines 46-67, at least col. 8, lines 1-55}. It would have been obvious to one of ordinary skill in the art to provide the method of MILMAN to include using the ranking feature of worker order or number of visit for dispatching or assigning work/task to the technician /worker as taught by HARRISON for the benefit of generating the work order request and tracking the technicians' progress more efficiency and effectively {HARRISON col. 1, lines 50-67}. As for the difference in the type of ranking parameters, such as visits numbers/order or time completion work order/order, the use of other similar work order ranking parameters would have been obvious to a skilled artisan as mere using other similar work order ranking parameters.

As for dep. claim 6, which deals with retrieving a route to customer's residences in a chronological order of a visit time, based on a current location of the appropriate repair worker, locations of the customers residences, and predetermined conditions. This is fairly taught in MILMAN, figure 18, col. 9, lines 12-25}.

As for dep. claim 7, which deals with issuing instructions for requesting an adjacent station to issue a dispatch instruction in the condition if the appropriate repair

worker is not able to be in time, this is inherently included in HARRISON ET AL, see {figure 7-8, col. 7, lines 20-34, lines 56-63 assign the number of worker order to the number of qualified technician, if the technician does not have time available to complete, the work order is classified as "unassigned" and the message is sent to the user}.

As for dep. claim 8, MILMAN discloses receiving a request for an on site repair from a customer [figure 2]; a database storing a schedule assigned to each repair worker {col. 4, lines 29-43 *storing a resulting list of service calls, technician selects the service calls on the handheld device*}; extracting a repair worker having much time left in his/her schedule based on data stored in the database [col. 4, lines 29-43]

As for claim 9, which deals with reconstructing the schedule of on-site service assigned to the extracted repair worker based on a destination location and a visit date and time, this is fairly taught in MILMAN, see {col. 7, lines 27-35}.

As for independent claim 13, MILMAN discloses a storage medium storing a repair worker assisting program which causes the computer to execute a method comprising:

a) receiving an instruction for dispatching a repair worker from a server that assists in dispatching repair worker [to perform maintenance tasks];

{see abstract, figure 1, col. 3, lines 20-50; col. 5, lines 52-61 and figure 2 steps 46-50, "*technician is instructed to dispatch to customer location*"; and col. 2, lines 46-67 "*technician receives the customer service calls for customers within the assigned geographic location* }.

b) upon receiving the instruction for dispatching a repair worker from the server, referencing a database that serves to manage repair worker for a plurality of areas, a scheduled visit number for each repair worker and an assigned number of repair workers for each area,

{see figures 1-2, col. 2, lines col. 3, lines 50-61, col. 7, lines 11-23, lines 64-67 disclose the managing a schedule visit ; and see col. 3, lines 7-20 disclose the assigned geographic location for the respective technician}

e) referencing a database that servers to manage a current location of repair workers

{see figures 1-2, 18, col. 3, lines 7-20, col. 6, lines 35-48, and col. 9, lines 12-25 disclose the tracking or managing the workers or technician for a plurality of areas}

f) extracting an appropriate repair worker based on the location of the customers' residence to be visited, current locations of the repair workers and the dispatch instruction

{see col. 3, lines 7-20 "assigned geographic location for the respective technician; col. 6, lines 28-35; col. 9, lines 12-25 disclose *technicians within the any respective geographical zone will be presented with the service call*}

g) notifying a mobile apparatus of the appropriate repair worker about the dispatch instruction

[see col. 4, lines 35-43 col. 5, lines 52-61; col. 6, lines 35-58 and figures 1 (hand held unit 26), figures 5-6 disclose notifying or transmitting or communicating between the server computer with the technician hand held device about the information or data

e.g. the service call or work order information appears to be a "data processing" method, therefore, the term "*dispatch instruction or information or data*" have been determined to be non-functional descriptive material (NFDM), thus having no patentable weight and does not need to be taught by the prior art. Nonfunctional descriptive material can not render nonobvious an invention that would have other wise been obvious. See MPEP 2106.01.

Note: for convenience, letters (a)-(g) are added to the beginning of each step.

MILMAN discloses all the limitation as cited above, except for step c and d which deal with generating or creating an order contain information about number of visit/worker having a range from low to high value of the number of visit and issuing the dispatch a worker in an area which have the least number of visit or number of work order.

In the similar method for generating or assignment task to technician/worker using the dispatch system, **HARRISON ET AL** teaches the generating/creating an order contain information about the ranking number of visit or worker order e.g. work order takes a shortest and longest to complete and the number of worker order or number of visit assigns to the qualified technicians who have enough available time to complete work and also minimum distance /location in order to generate the work order request and track the technicians' progress more efficiency and effectively {HARRISON col. 1, lines 50-67, figure 8, col. 7, lines 46-67, at least col. 8, lines 1-55}. It would have been obvious to one of ordinary skill in the art to provide the method of MILMAN to include using the ranking feature of worker order or number of visit for dispatching or assigning

work/task to the technician /worker as taught by HARRISON for the benefit of generating the work order request and tracking the technicians' progress more efficiency and effectively {HARRISON col. 1, lines 50-67}. As for the difference in the type of ranking parameters, such as visits numbers/order or time completion work order/order, the use of other similar work order ranking parameters would have been obvious to a skilled artisan as mere using other similar work order ranking parameters.

Therefore, MILMAN /HARRISON ET AL fairly teaches the claimed invention except for the extracting feature/parameter in the step of extracting/selecting of the appropriate worker, based on the dispatch instruction of which from the repair workers in an area with the smallest average number of visits in charge per repair worker. However, HARRISON ET AL teaches the extract/selecting of the appropriate worker based on the least time to complete a work of a qualified technician or completing a job shorter/faster which may needs to be scheduled for additional work, the selection of the workers that may need to be scheduled for additional work, such as from area with smallest number of visits, would have been obvious as mere selecting other equivalent parameters for worker that either has low number of visits/work orders or completing the jobs in a shorter time, either of which would require additional works to be fully occupied for a day work.

As for dep. claims 14-17, which basically deals with the computer implement method which carries the method steps of the dep. claims 6-9 have the same limitations as in dep. claims 6-9 above, they are rejected for the same reasons set forth rejection of dep. claims 6-9 above.

As for claims 18 and 20-23 below, Note that they appears that independent claims 18 and 20 is an apparatus claim. In examination of the apparatus claim, the claims must be structurally distinguishable from the prior art. While features of an apparatus claim may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP 2114. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Apparatus claims cover what a device is, not what a device does or steps, i.e. "unit that receives or calculates or judges, or notifies etc. ". See *Hewlett-Packard Co. vs. Bausch & Lomb Inc.* (Fed. Circ. 1990). Manner of operating the device or elements of the device, i.e. recitation with respect to the manner in which a claimed apparatus is intended to be employed/used, does not differentiate apparatus from the prior art apparatus. *Ex parte Masham*, 2 USPQ2d 1647 (BPAI, 1987).

Note: for convenience, numbers (1)-(13) are added to the beginning of each step of independent claim 18

As for independent claim 18, MILMAN disclose a repair worker assisting apparatus which assists dispatch of a repair workers who visits a customer's residence to perform a maintenance task upon receiving a request for maintenance from an apparatus of a customer {see figure 1}, the system comprising;

1) a first unit that receives repair content data inputted from an apparatus of a customer

{see col. 2, lines 55-60; col. 6, lines 1-21; figures 1-2...i.e. *receiving a service request from customer's computer (20)*;

2) a second unit that calculates a repair fee based on the repair content data [see col. 7, lines 11-16; figure 1 (element 30) and figure 2 (step 56)...i.e. *the invoicing functionality (30) generates a customer invoice for the particular service call and technician service time*];

3) a third unit that judges if a repair component is necessary based on the repair content data

[see figure 1-2, disclose determine if *replacement equipment , parts, or software are needed or necessary then request from a third party equipment supplier to ships a repair component or equipment to the customer address*; co. 6, lines 59-67; col. 7, lines 1-8; figure 2 (steps 54 and 57)];

4) a fourth unit notifies an apparatus on a side of a deliverer who delivers the repair component of an order for delivering the repair component to a customer [when the third unit determined that the component is necessary]

{see figures 1, 2, steps 54-57 and 10 and col. 7, lines 1-8;; col. 8, lines 24-28 disclose the using of computer or device to *notify or request from the third party provider to ship the requested equipment to the customer*}; Note as for the phrase "when the third unit determined.....is necessary "is intended use limitation for the system/device or apparatus and carries no patentable weight.

MILMAN discloses ordering and delivering the equipment to the customer, if the customer needs to order the software component, then the software can be delivered by

downloading electronically to the customer site (col. 3, lines 34-349; col. 7, lines 1-8), but except for receiving a notification of completion of delivery from the deliver in step 5. The examiner notes that receiving a notification of completion of delivery is common, old and well known in the art to ensure the customer of a complete job. Therefore, it is obvious to one of ordinary skill in the art to receive the notification or receipt or confirmation information when ordering or purchasing the items or product or software/hardware component for effective communication between parties. As for the phrase "after the repair component has been delivered to the customer" is intended use limitation for the system/device or apparatus and carries no patentable weight.

6) a sixth unit that notifies the apparatus of the customer of billing of the repair fee

{see figures 1,2, 14-15 disclose *billing screen displaying customer charges for completed work, inform customer of the charges to appear on an associated invoice;* (col. 3, lines 56-67); *billing information* (col. 4, lines 54-56; col. 7, lines 12-27));

7) a seventh unit that receives a notification of completion of payment from an apparatus on a side of a financial institute

{see col. 7, lines 12-27 and figures1, 14-15; col. 8, lines 35-50, *send the customer invoice information directly to a financial institution (32)*}; As for the phrase "after the customer has paid the repair fee into the financial institute " is intended use limitation for the system/device or apparatus and carries no patentable weight.

8) an eight unit that issues an instruction for dispatching a repair worker to the customer's residence,

{see col. 3, lines 20-50; col. 5, lines 52-61; figure 1; abstract, *technician is instructed to dispatch to customer location*}. As for the phrase "the notification of completion of payment was received" is intended use limitation for the system/device or apparatus and carries no patentable weight.

As for the steps 9-13 of the independent claim 18, which recite the units function carries the method steps (d-h) of the independent claim 5 above, therefore these steps are rejected for the same reason sets forth the steps (d-h) of the independent claim 5 above.

More over, as for duplication of units, for example, 3rd units, 4th, 14th units, the duplications of parts/items for multiple effects are well known and would have been obvious to a skilled artisan for multiple effects if desired. See In re Harza, 124 USPQ 378, CCPA 1960. Moreover, the units with the steps are also taught in MILMAN/HARRISON ET AL {see figure 1-2}

As for the independent claim 20, basically this claim recites the units function carries the method steps of the rejected independent claim 13 above, therefore it is rejected for the same reason sets forth the independent claim 13 above.

As for dependent claims 21-23, basically these claims recite the units function carries the method steps of the rejected dependent claims 6, 8-9 above, therefore they are rejected for the same reason sets forth the dependent claims 6, 8-9 above.

Response to Arguments

7. Applicant's arguments with respect to claims 5-9, 13-17, 18, 20-23 have been considered but are moot in view of the new ground(s) of rejection which are due to applicant's amendment.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ThuyVi Nguyen whose telephone number is 571-270-1614. The examiner can normally be reached on Monday through Thursday from 8:30 A.M to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on 571-272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. N./

Examiner, Art Unit 3689

/Tan Dean D. Nguyen/
Primary Examiner, Art Unit 3689
January 19, 2009